

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A method for forming a thin film magnetic recording media, the method comprising:

generating magnetic nanoclusters in gas phase;

heating the magnetic nanoclusters;

crystallizing the magnetic nanoclusters; and

depositing the magnetic nanoclusters onto a substrate to form a thin film of magnetic particles thereon;

~~wherein the magnetic nanoclusters are crystallized by being heated in gas phase.~~

2-6. (Cancelled)

7. (Previously presented) The method as recited in claim 1, further comprising mixing and encapsulating the magnetic nanoclusters with a non-magnetic material, wherein the non-magnetic material comprises an organic solvent.

8. (Previously presented) The method as recited in claim 1, further comprising mixing and encapsulating the magnetic nanoclusters with a non-magnetic material, wherein the non-magnetic material comprises a surfactant.

9. (Previously presented) The method as recited in claim 1, further comprising mixing the magnetic nanoclusters with a non-magnetic material, wherein the mixing is performed before the magnetic nanoclusters are crystallized.

10. (Previously presented) The method as recited in claim 9, wherein crystallizing of the magnetic nanoclusters comprises heating the magnetic nanoclusters and fixing the non-magnetic material onto the magnetic nanoclusters.

11. (Cancelled)

12. (Original) The method as recited in claim 1, further comprising providing a magnetic field adjacent to the substrate to control the orientation of the magnetic particles upon deposition.

13. (Previously presented) The method as recited in claim 12, wherein each of the magnetic particles has an easy axis parallel to a surface of the substrate.

14. (Original) The method as recited in claim 13, wherein the easy axes are parallel relative to each other.

15. (Previously presented) The method as recited in claim 12, wherein each of the magnetic particles has an easy axis perpendicular to a surface of the substrate.

16-33. (Cancelled)

34. (Currently amended) A method for forming a thin film magnetic recording media, the method comprising:

generating magnetic nanoclusters;

mixing the magnetic nanoclusters with a non-magnetic material[.];

crystallizing the magnetic nanoclusters; and

depositing the magnetic nanoclusters onto a substrate to form a thin film of magnetic particles thereon[.];

wherein the mixing is performed before the magnetic nanoclusters are crystallized.

35. (Previously presented) The method as recited in claim 34, further comprising encapsulating the magnetic nanoclusters with the non-magnetic material, wherein the non-magnetic material comprises an organic solvent.

36. (Previously presented) The method as recited in claim 34, further comprising encapsulating the magnetic nanoclusters with the non-magnetic material, wherein the non-magnetic material comprises a surfactant.

37. (Previously presented) The method as recited in claim 34, wherein crystallizing of the magnetic nanoclusters comprises heating the magnetic nanoclusters and fixing the non-magnetic material onto the magnetic nanoclusters.

38. (Previously presented) The method as recited in claim 34, further comprising providing a magnetic field adjacent to the substrate to control the orientation of the magnetic particles upon deposition.

39. (Previously presented) The method as recited in claim 38, wherein each of the magnetic particles has an easy axis parallel to a surface of the substrate.

40. (Previously presented) The method as recited in claim 39, wherein the easy axes are parallel relative to each other.

41. (Previously presented) The method as recited in claim 38, wherein each of the magnetic particles has an easy axis perpendicular to the surface of the substrate.

42. (Previously presented) A method for forming a thin film magnetic recording media, the method comprising:

generating magnetic nanoclusters;  
crystallizing the magnetic nanoclusters; and  
depositing the magnetic nanoclusters onto a substrate to form a thin film of magnetic particles thereon,  
wherein the method further comprises providing a magnetic field adjacent to the substrate to control the orientation of the magnetic particles upon deposition.

43. (Previously presented) The method as recited in claim 42, further comprising mixing and encapsulating the magnetic nanoclusters with the non-magnetic material, wherein the non-magnetic material comprises an organic solvent.

44. (Previously presented) The method as recited in claim 42, further comprising mixing and encapsulating the magnetic nanoclusters with the non-magnetic material, wherein the non-magnetic material comprises a surfactant.

45. (Previously presented) The method as recited in claim 42, further comprising mixing the magnetic nanoclusters with the non-magnetic material, wherein the mixing is performed before the magnetic nanoclusters are crystallized, and wherein crystallizing of the magnetic nanoclusters comprises heating the magnetic nanoclusters and fixing the non-magnetic material onto the magnetic nanoclusters.

46. (Previously presented) The method as recited in claim 42, wherein each of the magnetic particles has an easy axis parallel to a surface of the substrate.

47. (Previously presented) The method as recited in claim 46, wherein the easy axes are parallel relative to each other.

48. (Previously presented) The method as recited in claim 42, wherein each of the magnetic particles has an easy axis perpendicular to a surface of the substrate.